UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/416,757	10/12/1999	LILA MADOUR	040010-440	6600

			EXAMINER
27045	7590	09/16/2004	GEORGE, KEITH M

ERICSSON INC.
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ART UNIT	PAPER NUMBER
2663	

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _29 July 2004_.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-4 and 8-15_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-4 and 8-15_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _12 October 1999_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1-4, 8, 9, 11 and 13 are rejected under 35 U.S.C. 102(e) as being clearly

anticipated by Agraharam et al., U.S. Patent 6,407,988, hereinafter Agraharam.

3.   Referring to claim 1, Agraharam teaches mobility support services using mobility aware

access networks (title). A "Mobility Aware IP Network" is a wide area network that operates

according to Internet Protocol. It differs from a traditional wide area network because it includes

"home agents" and "foreign agents" that provide mobility services to mobile hosts (column 3,

lines 12-16). Hosts may be one of two types: "mobile hosts" and "stationary hosts." As the

name implies, mobile hosts may move among the premises networks while stationary hosts may

not. In figure 1, the shown laptop computes are mobile hosts; desktop computers and servers are

stationary hosts (column 3, lines 62-67). Mobile hosts register each time they connect to a new

premises network (request a second connection with a second data communications network).

As part of the registration process, a mobile host determines whether it is in its home network

(first data communication network) or a foreign network (second data communication network)

(column 4, lines 40-43). Given this background information, figures 2 and 4 will now be used to

show the teachings of Agraharam. Figure 4 shows an example of data flow between the mobile

host and the stationary host. Both the mobile host and stationary host are located in the mobile

host's virtual home network. Initially, privacy is maintained because the stationary host cannot

determine where the mobile host actually resides. The stationary host addresses data to the

mobile host at its home address. It transmits the data to the home network. The virtual home

network routes the data to the home agent (first gateway associated with the first data

communication network). The home agent determines the location of the mobile host and routes

the message to the mobile host (column 6, lines 37-50). Figure 2 illustrates an exemplary flow

of data between a mobile host and another host, called a "correspondent host." The

correspondent host addressed data to the mobile host using its home address. Based upon the

home address, the data is routed to the mobile host's home agent (first gateway associated with

the first data communication network). The home agent "tunnels" the data to the foreign agent

(second gateway) using the mobile host's care-of-address (establishing a tunnel between a first

gateway and second gateway). The foreign agent retransmits the data to the mobile host using

the mobile host's temporary foreign address (routing packets by the first gateway over a tunnel

to a second gateway and over a second connection based on the acquired gateway address to the

mobile device) (column 5, lines 27-44).

4.   Referring to claim 2, Agraharam teaches the method described in reference to claim 1

above and also clearly teaches that when a mobile host determines that it is located in a foreign

network, it registers with a foreign agent. The mobile host identifies the foreign agent, registers

with it and obtains a "care-of" address on the foreign network. Thereafter, either the mobile host

or the foreign agent communicate with the home agent and the mobility server providing the

mobile host's new care-of-address (an entity in the second data communications network

initiates the request for the establishment of a tunnel) (column 4, lines 51-59).

5.   Referring to claim 3, Agraharam teaches the method described in reference to claim 1

above where it was clearly shown that the home agent "tunnels" the data to the foreign agent

using the mobile host's care-of-address.

6.   Referring to claim 4, Agraharam teaches the method described in reference to claim 1

above and has also clearly taught that the mobile hosts register each time they connect to a new

premises network (mobile device initiates the request for the second connection) (column 4, lines

40-41).

7.   Referring to claim 8, Agraharam teaches the method described in reference to claim 2

above and also clearly teaches that the care-of-address is provided to the home agent.

8.   Referring to claims 9 and 11, Agraharam teaches the method described in reference to

claims 2 and 3 above where it is clearly shown that the home agent is a database storing

identities of mobile hosts within its network (centralized database). The identity (network

address) would be provided by the first gateway to the second gateway in the source address

portion of the header, which is essential to packet communications.

9.   Referring to claim 12, Agraharam teaches the method described in reference to claim 3

above and also clearly teaches that dynamic movement of a mobile host among foreign networks

does not cause a loss of data (column 9, lines 61-62). The steps involved in a host moving

among foreign networks are clearly described in reference to figure 8, these steps inherently

consume a finite period of time, in order for the data to not be lost during this time, there

inherently exists a type of buffers storage to hold the data during the host movement.

10.   Referring to claims 13 and 14, Agraharam teaches the method described in reference to

claim 4 above and has also been clearly shown to teach that the mobile host provides the home

agent with the care-of address identifying the foreign agent and after registering, either the

mobile host or the foreign agent communicate with the home agent (column 4, lines 51-59). In

order for the foreign agent to be able to communicate with the home agent, it must know the

identity of the foreign agent, which could only be obtained from the mobile host.

11.   Referring to claim 15, Agraharam teaches the method described in reference to claim 2

above teaches the method described in reference to claim 1 above, which clearly refers to a

mobile IP protocol (column 1, lines 21-24).

Claim Rejections - 35 USC § 103

12.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

13.   Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agraharam in

view of Turunen, U.S. Patent 6,487,595, hereinafter Turunen. Agraharam teaches the method

described in reference to claim 1 above with the possible exception of the first gateway being a

Gateway General Packet Radio Services Serving Node (GGSN). Turunen teaches resource

reservation in mobile Internet protocol including that the Mobile IP is implemented in either the

GGSN or the SGSN to route received data through the corresponding domain (i.e. GPRS or

HSCSD) in the GSM network (column 6, lines 37-40). At the time the invention was made it

would have been obvious to a person of ordinary skill in the art to include the GGSN or SGSN as

taught by Turunen in the method of Agraharam since both clearly teach methods related to

Mobile IP. One of ordinary skill in the art would have been motivated to do this in order to route

received Mobile IP data in the GSM network (Turunen, column 6, lines 37-40).

Response to Arguments

14.   Applicant's arguments filed 29 July 2004 have been fully considered but they are not

persuasive.

15.   On page 6 of the Reply Under 37 CFR 1.111, applicant argues that the HA and FA of

Agraharam are quite different than the first gateway associated with the first network and the

second gateway associated with the second network. In response, it is unclear what differences

applicant is attempting to point out. The gateways referred to in the claims are assigned to

networks and handle connections. The HA and FA of Agraharam are used to communicate with

the mobile (handle connections) depending on whether the mobile is in a home network or a

foreign network (HA and FA are assigned to different networks) (column 4, lines 40-59).

16.   Applicant also argues that Agraharam fails to disclose the step of establishing a first

connection in the first data communication network, requesting a second connection with a

second data communication network while the mobile station is moving towards the second data

communication network, acquiring an address of a second gateway in the second network and

then establishing a tunnel between the two gateways. In response, Agraharam does teach that

when a mobile is in it home network, it communicates with its home agent (establishing a first

connection in the first data communication network) and when it is in a foreign network it

registers with a foreign agent (requesting a second connection with a second data communication

network) (column 4, lines 40-59). Agraharam goes on to teach that as the mobile host moves

among foreign networks, the old fold foreign network becomes a "previously visited network"

and the new foreign network becomes the "currently visited network", therefore the mobile

registers with the foreign network as it is moving towards the foreign network (column 4, line 60

- column 5, line 1).

17.   Applicant also argues on page 7 that Agraharam teaches initiating a new communication

towards a second device and that Agraharam fails to teach a mobile changing data

communication networks from a first network to a second network while keeping an existing

session active and still receiving data packets received by the previous gateway. In response, it

is unclear how the "new communication" argued by the applicant is different from "requesting a

second connection with a second data communications network" as stated in the claim. The

second connection is not the same as the first connection, so by all accounts this could be

considered a "new communication". Also, it has been made clear that Agraharam teaches that

based upon the home address (existing active session still receiving data packets), WANs and

MAINs route the data to the mobile host's home agent. The home agent "tunnels" the data to the

foreign agent using the mobile host's care-of address (column 5, lines 27-44).

18.   No argument has been made for any dependent claims and therefore the rejections to

dependent claims 2-4 and 8-15 are maintained.

Conclusion

19.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Keith M. George whose telephone number is 571-272-3099. The

examiner can normally be reached on M-Th 7:00-4:30, alternate F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chau T. Nguyen can be reached on 571-272-3126. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Keith M. George
9 September 2004

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SUPERVISORY PATENT EXAMINE?
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